

Chemische Fabrik Wülfel	Safety Data Sheet in accordance with Regulation (EC) No 1907/2006	State: 03/01/2022
		Author: Splendido Version: 3.0
Kjeldahl tablets W00		Page 1 of 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

1.1.1. Trade name Kjeldahl tablets W00

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use descriptor category:

Life cycle stage (LCS)

Sector of use

PW: Widespread use by professional workers

SU24: Scientific research and development (analytical chemistry)

fine chemical

Technical function:

1.2.2. Uses advised against

not known

1.3. Details of the supplier of the safety data sheet

Chemische Fabrik Wülfel GmbH & Co. KG

Hildesheimer Straße 305, D-30519 Hannover, Germany

phone number: 0049 511 98496-0,

fax number: 0049 511 98406-40

e-mail address of the person responsible for

Safety Data Sheet: cfw@wuelfel.de

Web: www.wuelfel.de

1.4. Emergency telephone number

00 49 511 98496-0 (Office hours:

Monday - Thursday 8 o'clock a.m. to 2 o'clock p.m.)

or

Poison control centre north (Bremen, Hamburg, Lower Saxony, Schleswig-Holstein)

Tel.: 00 49 551-19 24 0 (24h emergency call)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP Regulation)

Not a hazardous substance.

2.2. Label elements

None.

2.3. Other hazards

The substance does not meet the criteria for classification as PBT or vPvB substance. The substance was not included in the list established in accordance with article 59(1) for having endocrine disrupting properties. The substance is not identified as having endocrine disrupting properties in accordance with criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

See also the sections 5, 6, 10, 11, 12,15.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS No	EC No	REACH Registration No	% w/w	Classification according to Regulation (EC) No 1272/2008
potassium sulfate	7778-80-5	231-915-5	01-2119489441-34	100,00	not classified as hazardous

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3.2. Mixtures

The substance is no mixture.

3.3. Additional information

None

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. General informations

Consult doctor in case of pathological signs.

4.1.2. In case of eye contact

Rinse widely opened eye for several minutes under running water. It is advisable to use an eyewash. Remove contact lenses, if present and easy to do. Further treatment by an ophthalmologist.

4.1.3. In case of skin contact

Remove contaminated clothing immediately and wash affected areas with soap and water.

4.1.4. Following ingestion

Rinse mouth with water and call a doctor! Do not induce vomiting! Encourage to drink water in small sips (dilution effect).

4.1.5. Following inhalation

If inhaling abrasive dust remove victim to fresh air.

4.1.6. Self-protection of the First Aider

Avoid contact with substance still present.

4.2. Most important symptoms and effects, both acute and delayed

None.

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, foam, carbon dioxide or extinguishing powder

Unsuitable extinguishing media:

not known

5.2. Special hazards arising from the substance or mixture

In a fire corrosive sulfur oxides can be released.

5.3. Advice for firefighters

Product is non-combustible, fire-extinguishing measures are to be adapted to surrounding.

The extinguishing water should not enter the sewage system!

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust. Do not eat or drink when handling Kjeldahl tablets. Always wear gloves, goggles and protective clothing.

6.2. Environmental precautions

Product should not be discharged into drains or waterways.

6.3. Methods and material for containment and cleaning up

Take up mechanically. In the post-cleaning avoid formation of dust. The spilled product should be discarded.

6.4. Reference to other sections

See sections 4, 7, 8 and 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not eat or drink when handling Kjeldahl tablets. Use protective gloves, goggles and protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Kjeldahl tablets should be stored dry in tightly closed containers, separate from foodstuffs, beverages and animal feedstocks.

7.3. Specific end use(s)

For determination of nitrogen by the Kjeldahl method.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium sulfate

General limit for dust (TRGS 900 (Technical Rules for Hazardous Substances)):

Inhalable fraction (I dust): 10 mg/m³ (TWA)

Respirable fraction (R dust): 1.25 mg/m³ (TWA)

DNEL (systemic)			
All figures are taken from REACH registration dossiers for potassium sulfate.			
Route	Substance	Worker	General population
Inhalation (Long term exposure)	potassium sulfate	37.6 mg/m ³	11.1 mg/m ³
Dermal (Long term exposure)	potassium sulfate	21.3 mg/kg bw/day	12.8 mg/kg bw/day
Oral (Long term exposure)	potassium sulfate	-	12.8 mg/kg bw/day

PNEC

All figures are taken from REACH registration dossiers for potassium sulfate.

Substance	potassium sulfate
Freshwater	0.68 mg/l
Seawater	0.068 mg/l
Sediment (Freshwater)	not sufficiently accurate data available
Sediment (Seawater)	not sufficiently accurate data available
Soil	not sufficiently accurate data available

8.2. Exposure controls

Ensure good ventilation. Avoid formation of dust.

8.2.1. Personal protective equipment

8.2.1.1. Eye / Face protection

Safety glasses required.

8.2.1.2. Respiratory protection

Required when occurrence of dusts (particle filter P2 according to DIN 3181).

8.2.1.3. Skin protection

Chemical protective gloves, e.g. consisting of nitrile rubber (check for damage before use), penetration time (value for permeation: Level 6, > 480 min, EN 374)

8.2.2. General health and safety measures

Avoid unnecessary contact with the product.

Wash hands after work, change contaminated clothing.

While using do not eat, drink or smoke.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value/Description
Physical state	solid (tablets)
Weight	5.0 g
Colour	white
Odour	odourless
Melting point/freezing point	1069 °C/not applicable
Boiling point or initial boiling point and boiling range	1689 °C
Flammability	not applicable, since solid
Lower and upper explosion limit	see the comments on flammability
Flash point	not applicable, since inorganic solid
Auto-ignition temperature	not applicable, since inorganic solid
Decomposition temperature	not determined, no information available
pH	6.48 (at 50 g/l H ₂ O) at 20 °C
Kinematic viscosity	not applicable, since inorganic solid
Solubility	111 g/l H ₂ O at 20 °C
Partition coefficient n-octanol/water (log value)	not applicable, since inorganic solid
Vapour pressure	< 10 ⁻¹ Pa at 20 °C
Density and/or relative density	2.66 g/cm ³ at 20 °C
Bulk density	1240 kg/m ³ at 20 °C
Relative vapour density	Not applicable, since vapour pressure too low
Particle characteristics	not relevant because pressed tablets are present

9.2. Other information

Other physical and chemical properties have not been determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific reactivity.

10.2. Chemical stability

No decomposition when used and stored as intended.

10.3. Possibility of hazardous reactions

Not known

10.4. Conditions to avoid

The contact with moisture.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

If the product is overheated or in a fire corrosive sulfur oxides can be released.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. Acute toxicity

All figures are taken from REACH registration dossiers for potassium sulfate.

Acute oral toxicity

Potassium sulfate: LD₅₀ (rat) > 2000 mg/kg bw (OECD Test guideline 425)

Acute dermal toxicity

Potassium sulfate: LD₅₀ (rat) > 2000 mg/kg bw (OECD Test guideline 402)

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Acute inhalation toxicity

Potassium sulfate: LC₀ (rat): 3.6 mg/m³/4h (OECD Test guideline 433 draft), read across to Ammonium sulfate

11.1.2. Skin corrosion/irritation

The product is not classified as a skin irritant or as corrosive to the skin.

11.1.3. Serious eye damage/irritation

The product can cause eye irritations. The effect is not relevant for classification.

11.1.4. Respiratory or skin sensitisation

Not known

11.1.5. Germ cell mutagenicity

Not known

11.1.6. Carcinogenicity

Not known

11.1.7. Reproductive toxicity

Not known

11.1.8. Specific target organ toxicity (single exposure)

Not known

11.1.9. Specific target organ toxicity (repeated exposure)

Not known

11.1.10. Aspiration hazard

Not known

11.2. Information on other hazards

There are no indications on other hazards.

SECTION 12: Ecological information

12.1. Toxicity

12.1.1. Acute aquatic toxicity

All figures are taken from REACH registration dossiers for potassium sulfate.

Toxicity to fish

Potassium sulfate

LC₅₀ (*Pimephales promelas*, 96 h): 680 mg/l (Test guidelines EPA/600/4-90/027 and EPA/600/6-91/003)

Toxicity to daphnia

Potassium sulfate

EC₅₀ (*Daphnia magna*, 48 h): 720 mg/l (Test guidelines EPA/600/4-90/027 and EPA/600/6-91/003)

Toxicity to algae

Potassium sulfate

EC₅₀ (*Chlorella vulgaris*, 18 d): 2700 mg/l (read-across to Ammonium sulfate)

12.1.2. Chronic aquatic toxicity

Not sufficiently accurate data available in the REACH registration dossier of potassium sulfate.

12.2. Persistence and degradability

Not known

12.3. Bioaccumulative potential

Not known

12.4. Mobility in soil

Potassium sulfate has a high mobility due to its good solubility in water.

12.5. Results of PBT and vPvB assessment

Not applicable to inorganic substances.

12.6. Endocrine disrupting properties

The substance was not included in the list established in accordance with article 59(1) for

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having endocrine disrupting properties. The substance is not identified as having endocrine disrupting properties in accordance with criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product residues and the packaging must be disposed in accordance with the Waste Directive 2008/98/EC and national and regional regulations.

The revised list of waste pursuant to article 7 of the Directive was published with the Commission's Decision 2014/955/EU.

Product

Waste key:

06 03 14 (solid salts and solutions not containing cyanides or heavy metals)

Packaging

Contaminated packaging should be disposed of like the product.

SECTION 14: Transport information

Not hazardous substance according to the national and international dangerous goods Regulations

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU regulations

Safety Data Sheet:

Regulation (EC) No 1907/2006 (REACH), Annex II (SDS) amended by Regulation (EU) 2020/878.

Classification and labelling:

Regulation (EC) No 1272/2008 (CLP (EU-GHS) Regulation)

15.1.2. Basic national regulations (Germany)

Act for the protection of young people at work (JARbSchG)

Observe employment restrictions according to § 22 for teens.

Act for the protection of mothers at work, in education and in study (MuSchG)

Inadmissible activities and working conditions according to §§ 11 and 12 MuSchG for expectant and nursing mothers.

Act on protection against hazardous substances (Chemicals Act (ChemG))

Regulation on protection against hazardous substances (Hazardous Substances Regulation (GefStoffV))

Regulation on bans and restrictions on the marketing and delivery of certain substances, mixtures and products pursuant to the Chemicals Act (ChemVerbotsV)

Ordinance on facilities for handling substances that are hazardous to water (AwSV) of 18 April 2017.

Potassium sulfate (identification number: 255, see database Rigoletto): Water hazard class (WGK): 1 (slightly hazardous to water)

The same classification applies to the Kjeldahl tablets W00.

Water hazard class (WGK) of Kjeldahl tablets W00: 1 (slightly hazardous to water)

15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not created.

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SECTION 16: Other information

16.1. Indication of changes

- Subsection 1.4. - changed office hours
- Subsection 2.3. - addition of information about endocrine disrupting properties
- Subsection 7.2. - Deletion of the specification of the storage class, as there is no hazardous substance
- Subsection 9.1. - adaptation to Regulation (EU) 2020/878
- Subsection 11.2. - new
- Subsection 12.6. - new
- Subsection 15.1.1. - update
- Subsection 16.2. - update

16.2. Literature and sources

Directives and Regulations

Regulation (EC) No 1907/2006 (REACH), was last amended by Regulation (EU) 2021/2204
CLP (EU-GHS) Regulation (EC) No 1272/2008, was last amended by Regulation (EU) 2021/1962

REACH registration dossiers

Potassium sulfate (REACH Registration No 01-2119489441-34)

16.3. Abbreviations and acronyms

bw	body weight
CAS	Chemical Abstracts Service
CLP	Classification, Labelling, Packaging
DIN	German Institute for Standardization Incorporated Society - Deutsches Institut für Normung e. V.
DNEL	Derived No Effect Level
dw	dry weight
EC	European Community
EC	Effective Concentration
ECHA	European Chemicals Agency
EPA	Environmental Protection Agency
EU	European Union
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
LC	Lethal Concentration
LD	Lethal Dose
NOEC	No Observed Effect level Concentration
PBT	Persistent, Bioaccumulative, Toxic
PNEC	Predicted No Effect Concentration
REACH	Regulation, Evaluation and Authorization of Chemicals
TRGS	Technical Rules for Hazardous Substances
vPvB	very persistent and very bioaccumulative

16.4. Further information

This information is based on our present knowledge, they do not constitute an assurance of product properties and establishes no contract legal rights.